

ABSTRACT OF THE DISCLOSURE

An apparatus for increasing channel capacity in a mobile communication system using a hybrid phase shift keying (HPSK) modulation method. The method includes a walsh code control unit for checking sequences of walsh codes respectively outputted from a first walsh code unit and a second walsh code unit, a walsh rotator for generating a plurality of repeated complex functions and outputting them and a rotator control unit for selecting the repeated complex functions outputted from the walsh rotator according to the sequence of the walsh codes outputted from the first walsh code unit and the second walsh code unit. The method can use all walsh codes and increase reverse channel capacity.